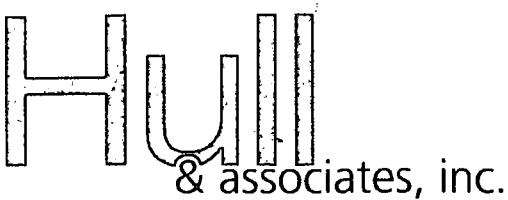


From GM Linden NJD 002 186 690



13

February 28, 2012

Mr. Gary Greulich  
New Jersey Department of Environmental Protection  
Northern Regional Office  
7 Ridgedale Avenue  
Cedar Knolls, NJ 07927

RE: Remedial Action Progress Report No. 10 for the Industrial #1 Redevelopment Area  
Portion of the Former General Motors (GM) Linden Assembly Plant, 1016 West Edgar  
Road, Linden, Union County, New Jersey 07036; DUK059.701.0098.

Dear Mr. Greulich:

On May 28, 2009, the New Jersey Department of Environmental Protection (NJDEP) approved the New Jersey Remedial Action Workplan and RCRA Corrective Measures Proposal Addendum No. 2 (RAWP) for the Industrial #1 Redevelopment Area of the Former GM Linden Assembly Plant (Site; SRP PI# 014755; EA ID# SUB090001; BFO File Number: 20-09-24). The May 28, 2009 approval letter requested Remedial Action Progress Report for the Industrial #1 Redevelopment Area on/by November 30, 2009. Subsequent reports are submitted on a quarterly basis.

This letter constitutes Remedial Action Progress Report No. 10 for the Industrial #1 Redevelopment Area. Hull & Associates, Inc. (Hull) has prepared this report on behalf of Linden Development LLC (Linden Development) to summarize remedial activities completed on the Site between December 1, 2011 and February 28, 2012.

Requirements, according to N.J.A.C. 7:26E-6.6, are shown below in ***bold italics***, with Hull/Linden Development's update following. The report certification required by N.J.A.C. 7:26E-1.5 is included in Attachment A.

1. ***NJDEP requires a description of each planned remedial action***
  - i. ***scheduled to be initiated or completed within the reporting period***
  - ii. ***actually initiated or completed during the reporting period; and***
  - iii. ***scheduled but not initiated or not completed during the reporting period, including the reasons for the noncompliance with the approved schedule.***

Soil

As outlined in the approved RAWP, the remedial activities for soils on the Industrial #1 Redevelopment Area consist of the following:

- a. Establishing deed restrictions or environmental covenants to maintain commercial/industrial land use at the Site;



- b. Regrading the site to achieve the grade necessary to support the proposed redevelopment;
- c. Constructing building slabs, parking areas and roadways and placing one foot of clean soil over geotextile fabric in future greenspaces to preclude direct contact exposures to future receptor populations and/or provide cover to historical fill material; and
- d. Surveying to demonstrate that all areas are covered with engineering controls (e.g., building slabs, parking areas and roadways) or one foot of clean soil.

These remedial activities are directly related to construction activities associated with the future redevelopment at the Site which are dependent upon finalization of agreements with end users. Linden Development has been working throughout the reporting period to establish agreements with end users to ultimately occupy various portions of the Site. Given that end user agreements have not been established, a majority of the construction activities described in the RAWP have not yet been initiated.

As discussed in the previous quarterly report, Linden Development did initiate targeted earthwork within the northern portion of the Industrial #1 Redevelopment Area. The earthwork included importing additional fill materials, asphalt milling in targeted areas and placement of structural fill to raise the existing grade within the footprint of the proposed northern industrial building. All activities were conducted consistent with the approved RAWP.

The primary fill material imported during the period consists of native sand and gravel excavated from Upper Pleistocene glacial deposits as part of tunneling operations associated with new railroad tunnels at the Metropolitan Transportation Authority / Long Island Rail Road (MTA/LIRR) East Side Access Project, Long Island City, New York. These materials consist of native sand and gravel from a virgin source. As such, characterization sampling is not required pursuant to the RAWP. Nonetheless, characterization and quality assurance sampling has been conducted and results indicate that no parameters are present above applicable cleanup levels (material meets residential criteria). Example characterization results were provided in the previous quarterly report. The fill supplier continues to provide ongoing sampling results as part of the quality assurance program established by the MTA/LIRR project.

In addition to the sand and gravel from the MTA/LIRR project, a small volume of soils (681 cubic yards) was imported from a City of Linden stockpile source that was previously sampled and accepted for use at the site. The City of Linden material was previously approved pursuant to the RAWP and a majority of that source imported to the site during a previous reporting period. The portion imported during this reporting period represents the balance of the original stockpile.

Table 1 provides a summary of the materials imported to date.

The fill material placed during the reporting period within the proposed building footprint consists primarily of the sand and gravel from the MTA/LIRR source discussed above. These materials were supplemented with minor amounts of stockpiled material that was

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imported during previous reporting periods. All fill placement was tracked pursuant to the approved RAWP.

**Groundwater**

The RAWP for the Industrial #1 Redevelopment Area was limited to soils. Groundwater actions, if any, are related to resolution of the disputed groundwater issue between the Site and neighboring Merck Pharmaceutical facility. Evaluation of the disputed groundwater issue is ongoing.

**Storm Sewer (AOI-18)**

Remedial activities associated with AOI-18 are complete, as documented in Remedial Action Progress Report No. 1 (November 2009).

***2. NJDEP requires discussion of problems and delays in the implementation of the RAWP, which should include proposals for corrections.***

As discussed above, remedial activities are directly related to construction activities associated with the future redevelopment at the Site which are dependent upon establishment of agreements with end users. Given current economic conditions, a majority of the construction activities described in the RAWP will not be implemented until redevelopment deals with end users are established.

Linden Development is continuing to pursue agreements with end users for the Industrial #1 Redevelopment Area. In the interim, conditions at the Site are stable given that GM's original cover types (asphalt, building pads, etc.) remain intact across a majority of the area. In the northern portion of the area where Linden Development is currently placing structural fill to support future building construction, site contractors are employing best management practices and are complying with applicable laws/regulations.

***3. NJDEP requires proposals for a deviation from, or modification to, the approved RAWP.***

No deviations from, or modifications to, the approved RAWP are planned or required at this time.

As part of the earthwork activities conducted within the northern portion of the site, Linden Development encountered an orphan underground storage tank (UST). The UST was encountered on December 14, 2011, and Linden Development immediately contacted the NJDEP Case Manager. Follow-up investigation determined that the tank was 12,000 gallons in size and contained unleaded gasoline.

Following discussions with the NJDEP Case Manager, the UST was removed by a NJ-certified UST contractor (VA Spatz and Sons) under the direction of a NJ-certified subsurface evaluator (J.M Sorge, Inc.). The UST was found to be intact with no holes or evidence of release. Analytical samples collected pursuant to the NJDEP Technical Regulations indicated that no release from the UST had occurred. A UST Notification and UST Questionnaire were submitted to NJDEP on January 24, 2012. A final UST closure report is currently being finalized and will be submitted to NJDEP upon completion.

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**4. NJDEP requires submittal of a revised schedule pursuant to N.J.A.C. 7:26E-6.5, to reflect the changes as noted in 1 through 3 above.**

As noted above, establishment of agreements with end users is the driving force behind the redevelopment of the Site and implementation of the RAWP. Linden Development continues to pursue agreements with end users and will provide updates in subsequent quarterly reports. The next progress report is scheduled to be submitted on or before May 31, 2012.

**5. NJDEP requires an updated status of all permit applications relative to the critical path schedule.**

The permits required for initiation of the remedial activities are summarized below.

Permit/Approval Type	Status	Notes
Planning Board Approval	Approved 11/17/08	Site plan approved by City of Linden Planning Board
NPDES Permit (Storm Water)	Approved 9/16/09	NPDES Permit No. 0088323
Soil Conservation District	Approved 9/16/09	Approved by Somerset-Union Conservation District

**6. NJDEP requires a listing of each remedial action to be performed during the next reporting period.**

Linden Development anticipates continuing to import structural fill material during the next reporting period. In addition, fill placement will continue within the northern portion of the area until the grade required to support the future northern industrial building is achieved.

Additional earthwork to support an industrial building in the southern portion of the site may also be initiated, depending on the outcome of ongoing negotiations with site end users. Linden Development will continue to provide updates to the NJDEP Case Manager as details associated with various redevelopment negotiations are finalized.

**7. NJDEP requires costs of each remedial action**

- i. Annual summary of all remedial action costs incurred to date; and
- ii. Revised cost estimate for remedial actions remaining to be performed.

The bulk of construction and remedial implementation has not yet commenced. Costs that have been incurred include approximately \$7,000 for AOI-18 storm sewer cleaning, approximately \$15,000 for UST closure activities and approximately \$370,000 for earthwork activities to date.

The overall cost estimate for completing remedial activities remains consistent with that presented in the RAWP (i.e., approximately \$11,900,000 for earthwork and construction of engineering controls).

**8. NJDEP requires a tabulation of sampling results (according to N.J.A.C. 7:26E-3.13(c)3) received during the reporting period and a summary of the data and any conclusions, presented in a format consistent with N.J.A.C. 7:26E-4.8.**

Sampling results associated with ongoing quality assurance sampling of the sand and gravel from the MTA/LIRR East Side Access project are summarized in Attachment B.

As discussed previously, an orphan UST was discovered during the reporting period. Closure samples were collected and analyzed during the reporting as part of the UST closure process. The analytical results indicated that no release from the UST had occurred. A final UST closure report summarizing the analytical results is currently being finalized and will be submitted to NJDEP upon completion.

- 9. NJDEP requires a summary of active groundwater remedial actions**
  - i. *groundwater elevation maps with groundwater flow shown immediately before and during active groundwater remediation;*
  - ii. *graphs depicting changes in concentrations over time for all impacted wells as well as all down-gradient wells;*
  - iii. *summary of volume of water treated since last reporting period and the total volume treated since active remedial action commenced; and*
  - iv. *Summary of groundwater contamination, indicating either that contamination remains above applicable standards (include a proposal detailing additional remedial actions) or that concentrations are below applicable standards.*

The RAWP for the Industrial #1 Redevelopment Area was limited to soils only. Therefore, this section is not applicable.

- 10. NJDEP requires a summary of natural remediation groundwater remedial actions**
  - i. *Summary table of the groundwater monitoring results collected; and*
  - ii. *Conclusions whether data indicate that natural remediation is no longer appropriate (must then also submit a revised RAWP)*

The RAWP for the Industrial #1 Redevelopment Area was limited to soils only. Therefore, this section is not applicable.

- 11. NJDEP requires a description of all wastes generated as a result of the remedial action**
  - i. *Tabulation of waste characterization samples collected, including the physical state of the material, volume, number of samples, analyses performed and results;*
  - ii. *Listing of types and quantities of waste generated by the remedial action during the reporting period as well as to date;*
  - iii. *Name of the disposal facility used;*
  - iv. *Transporters' dates of disposal; and*
  - v. *Manifest numbers of each waste shipment.*

No wastes were generated during the reporting period.

- 12. NJDEP requires that any additional support documentation that is available also be provided (photos, etc.).**

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Given that the majority of the remedial activities have not yet been implemented, no additional support documentation is available.

The next scheduled remedial action progress report will include remedial actions completed between February 29, 2012 and May 31, 2012. Please feel free to contact Bill Dennis at (412) 446-0315 with any questions regarding the update provided herein.

Sincerely,

A handwritten signature in black ink, appearing to read "W.H. Dennis III".

Bill Dennis  
Senior Project Manager

Attachments

ct: Brian Strohl – Linden Development, LLC  
Clifford Ng – U.S. EPA Region 2

## **TABLES**

**LINDEN DEVELOPMENT LLC SITE (FORMER GM LINDEN ASSEMBLY PLANT)**  
**1016 WEST EDGAR ROAD, LINDEN, NJ**  
**QUARTERLY REPORT NO. 10 - INDUSTRIAL NO. 1 REDEVELOPMENT AREA**

**TABLE 1**  
**SUMMARY OF FILL MATERIALS IMPORTED AS OF MID-FEBRUARY 2012**

Import Date	Source	Supplier	Quantity	Material Type	Anticipated Site Use
<b>Soils and Crushed Concrete Imported Prior to Current Reporting Period</b>					
Pre-February 2010	City of Rahway, NJ - Former firing range soil stockpile	City of Rahway, NJ	800 cy	Soils	Structural fill to be covered by engineering controls
Pre-February 2010	City of Linden, NJ - 2300 S. Wood Street - soil stockpile from City's Parks Dept.	City of Linden, NJ	2,865 cy	Soils	Structural fill to be covered by engineering controls
April / May 2010	New 121st. Police Precinct -970 Sanders Street, Staten Island, NY - excess soils from construction project	Pure Earth, Inc.	2,973 cy	Soils	Structural fill to be covered by engineering controls
April / May 2010	Newark Public Schools Stadium - excess soils from construction project	AWT Environmental Services, Inc.	3,397 cy	Soils	Structural fill to be covered by engineering controls
May 2010	Newark Brick Tower - Residential Tower Demolition - processed backfill material	DEMREX and Altchem Environmental	15,680 cy	Soils/Crushed Concrete	Structural fill to be covered by engineering controls
June 2010	New 121st. Police Precinct -970 Sanders Street, Staten Island, NY - excess soils from construction project	Pure Earth, Inc.	1,178 cy	Soils	Structural fill to be covered by engineering controls
June 2010	City of Linden, NJ - Library Site - excess soils from construction project	City of Linden, NJ	2,300 cy	Soils	Structural fill to be covered by engineering controls
July 2010	New 121st. Police Precinct -970 Sanders Street, Staten Island, NY - excess soils from construction project	Pure Earth, Inc.	1,516 cy	Soils	Structural fill to be covered by engineering controls
8/24/10	New 121st. Police Precinct -970 Sanders Street, Staten Island, NY - excess soils from construction project	Pure Earth, Inc.	658 cy	Soils	Structural fill to be covered by engineering controls
9/23/10	New 121st. Police Precinct -970 Sanders Street, Staten Island, NY - excess soils from construction project	Pure Earth, Inc.	567 cy	Soils	Structural fill to be covered by engineering controls
9/27/2010	Weldon Materials - crushed stone (virgin source)	Weldon Materials	142 cy	Crushed Stone	Unrestricted (Virgin Source Material)
9/29/2010	Weldon Materials - crushed stone (virgin source)	Weldon Materials	55 cy	Crushed Stone	Unrestricted (Virgin Source Material)
10/5/10	New 121st. Police Precinct -970 Sanders Street, Staten Island, NY - excess soils from construction project	Pure Earth, Inc.	699 cy	Soils	Structural fill to be covered by engineering controls
10/19/10	New 121st. Police Precinct -970 Sanders Street, Staten Island, NY - excess soils from construction project	Pure Earth, Inc.	655 cy	Soils	Structural fill to be covered by engineering controls
12/15/10	New 121st. Police Precinct -970 Sanders Street, Staten Island, NY - excess soils from construction project	Pure Earth, Inc.	328 cy	Soils	Structural fill to be covered by engineering controls
12/16/10	New 121st. Police Precinct -970 Sanders Street, Staten Island, NY - excess soils from construction project	Pure Earth, Inc.	165 cy	Soils	Structural fill to be covered by engineering controls
		<b>Subtotal:</b>	<b>33,978 cy</b>		

**LINDEN DEVELOPMENT LLC SITE (FORMER GM LINDEN ASSEMBLY PLANT)**  
**1016 WEST EDGAR ROAD, LINDEN, NJ**  
**QUARTERLY REPORT NO. 10 - INDUSTRIAL NO. 1 REDEVELOPMENT AREA**

**TABLE 1**  
**SUMMARY OF FILL MATERIALS IMPORTED AS OF MID-FEBRUARY 2012**

Import Date	Source	Supplier	Quantity	Material Type	Anticipated Site Use
<b>Soils and Crushed Concrete Imported During Current Reporting Period</b>					
Dec 2011 through 2/16/12	MTA/LIRR East Side Access Project - native sand and gravel from installation of new railroad tunnels	Impact Environmental	12,710 cy	Soils	Unrestricted (Virgin Source Material)
2/7/12 and 2/8/12	City of Linden, NJ - 2300 S. Wood Street - soil stockpile from City's Parks Dept.	City of Linden, NJ	681 cy	Soils	Structural fill to be covered by engineering controls
		<b>Subtotal:</b>	<b>13,391 cy</b>		
	<b>Total for Soils and Crushed Concrete Imported to Date:</b>		<b>47,369 cy</b>		
<b>Asphalt Millings Imported Prior to Current Reporting Period</b>					
Pre-February 2010	City of Linden, NJ - Residential Streets - asphalt millings	City of Linden, NJ	1,434 cy	Asphalt Millings	Subgrade material for future paved areas
		<b>Subtotal:</b>	<b>1,434 cy</b>		
<b>Asphalt Millings Imported During Current Reporting Period</b>					
NA	None during current reporting period	NA	0 cy		
		<b>Subtotal:</b>	<b>0 cy</b>		
	<b>Total for Asphalt Millings Imported to Date:</b>		<b>1,434 cy</b>		

**ATTACHMENT A**

**Report Certification**

**Certification**

**Linden Development, LLC  
ISRA Case Number E20040531**

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Date:

2/27/12

Linden Development, LLC

By:

  
William J. DeBoer, Executive V.P.

Sworn to and subscribed to before  
me on this 27th day  
of February, 2012

Deena D. Guest  
Notary



Deena D. Guest  
Notary Public-State of  
Massachusetts  
My Commission Expires  
May 28, 2013

**ATTACHMENT B**

**Lab Results for Import Material**

Soil Analysis  
Location: 29-76 Northern Blvd, Long Island City

Impact Submittal 322a  
11/29/11

CAS Number	Parameter Name	Parameter ID	NJ RDCSRS	Lincoln Park Landfill Acceptance Criteria	YL TCS 6 COMP	YL TCS 6 GRAB
	Sample ID	Depth	ug/kg	ug/kg	ug/kg	ug/kg
	Unit					
630-20-6	1,1,1,2-Tetrachloroethane	VOC	NA	NA	<6.6	
71-55-6	1,1,1-Trichloroethane	VOC	290,000	4,200,000	<6.6	
79-34-5	1,1,2,2-Tetrachloroethane	VOC	1,000	3,000	<6.6	
79-00-5	1,1,2-Trichloroethane	VOC	2,000	6,000	<6.6	
76-13-1	1,1,2 Trichloro-1,2,2 Trifluoroethane	VOC	NA	NA	<6.6	
92-52-4	1-1- Biphenyl	VOC	3,100,000	34,000,000	<6.6	
75-34-3	1,1-Dichloroethane	VOC	8,000	24,000	<6.6	
75-35-4	1,1-Dichloroethene	VOC	11,000	150,000	<6.6	
96-18-4	1,2,3-Trichloropropane	VOC	NA	NA	<6.6	
95-63-6	1,2,4-Trimethylbenzene	VOC	NA	NA	<6.6	
96-12-8	1,2-Dibromo-3-Chloropropane	VOC	80	200	<6.6	
106-93-4	1,2-Dibromoethane	VOC	8	40	<6.6	
95-50-1	1,2-Dichlorobenzene	VOC	5,300,000	59,000,000	<6.6	
107-06-2	1,2-Dichloroethane	VOC	900	3,000	<6.6	
78-87-5	1,2-Dichloropropane	VOC	2,000	5,000	<6.6	
108-67-8	1,3,5-Trimethylbenzene	VOC	NA	NA	<6.6	
541-73-1	1,3-Dichlorobenzene	VOC	5,300,000	59,000,000	<6.6	
142-28-9	1,3-Dichloropropane	VOC	NA	NA	<6.6	
542-75-6	1,3-Dichloropropene(cis and trans)	VOC	2,000	7,000	<6.6	
106-46-7	1,4-Dichlorobenzene	VOC	5,000	13,000	<6.6	
123-91-1	1,4-Dioxane	VOC	NA	NA	<6.6	
78-93-3	2-Butanone	VOC	3,100,000	44,000,000	<6.6	
95-49-8	2-Chlorotoluene	VOC	NA	NA	<6.6	
108-10-1	4-Methyl-2-Pentanone	VOC	NA	NA	<6.6	
67-64-1	Acetone	VOC	70,000,000	NA	<6.6	
107-02-8	Acrolein	VOC	500	1,000	<6.6	
107-13-1	Acrylonitrile	VOC	900	3,000	<6.6	
71-43-2	Benzene	VOC	2,000	5,000	<6.6	
92-87-5	Benzidine	VOC	700	700	<6.6	
74-97-5	Bromochloromethane	VOC	NA	NA	<6.6	
75-27-4	Bromodichloromethane	VOC	1,000	3,000	<6.6	
75-25-2	Bromoform	VOC	81,000	280,000	<6.6	
74-83-9	Bromomethane	VOC	25,000	59,000	<6.6	
75-15-0	Carbon Disulfide	VOC	7,800,000	110,000,000	<6.6	
56-23-5	Carbon Tetrachloride	VOC	600	2,000	<6.6	
108-90-7	Chlorobenzene	VOC	510,000	7,400,000	<6.6	
124-48-1	Chlorodibromomethane	VOC	3,000	8,000	<6.6	
75-00-3	Chloroethane	VOC	220,000	1,100,000	<6.6	
67-66-3	Chloroform	VOC	600	2,000	<6.6	
74-87-3	Chloromethane	VOC	4,000	12,000	<6.6	
156-59-2	cis-1,2-Dichloroethene	VOC	230,000	560,000	<6.6	
74-95-3	Dibromomethane	VOC	NA	NA	<6.6	
75-71-8	Dichlorodifluoromethane	VOC	490,000	230,000,000	<6.6	
100-41-4	Ethylbenzene	VOC	7,800,000	110,000,000	<6.6	
98-82-8	Isopropylbenzene	VOC	NA	NA	<6.6	
79-20-9	Methyl Acetate	VOC	78,000,000	NA	<6.6	
75-09-2	Methylene Chloride	VOC	34,000	97,000	<6.6	
1634-04-4	Methyl Tert-Butyl Ether	VOC	110,000	320,000	<6.6	
91-20-3	Naphthalene	VOC	6,000	17,000	<6.6	
104-51-8	n-Butylbenzene	VOC	NA	NA	<6.6	
103-65-1	n-Propylbenzene	VOC	NA	NA	<6.6	
99-87-6	p-Isopropyltoluene	VOC	NA	NA	<6.6	
135-98-8	sec-Butylbenzene	VOC	NA	NA	<6.6	
100-42-5	Styrene	VOC	90,000	260,000	<6.6	
98-06-6	tert-Butylbenzene	VOC	NA	NA	<6.6	
75-65-0	Tertiary Butyl Alcohol	VOC	1,400,000	11,000,000	<6.6	
127-18-4	Tetrachloroethene	VOC	2,000	5,000	<6.6	
108-88-3	Toluene	VOC	6,300,000	91,000,000	<6.6	
1330-20-7	Total Xylenes	VOC	12,000,000	170,000,000	<6.6	
156-60-5	trans-1,2-Dichloroethene	VOC	300,000	1,000,000	<6.6	
79-01-6	Trichloroethene	VOC	7,000	20,000	<6.6	
75-69-4	Trichlorofluoromethane	VOC	23,000,000	340,000,000	<6.6	
108-05-4	Vinyl Acetate	VOC	NA	NA	<6.6	
75-01-4	Vinyl Chloride	VOC	700	2,000	<6.6	

**Soil Analysis**  
 Location: 29-76 Northern Blvd, Long Island City

Impact Submittal 322a  
 11/29/11

CAS Number	Parameter Name	Parameter ID	NJ RDCSRS	Lincoln Park Landfill Acceptance Criteria	YL TCS 6 COMP	YL TCS 6 GRAB
87-68-3	Hexachlorobutadiene	SVOC	6,000	25,000		<6.6
122-66-7	1,2-Diphenylhydrazine	SVOC	700	2,000	<290	
120-82-1	1,2,4-Trichlorobenzene	SVOC	73,000	820,000	<290	
95-95-4	2,4,5-Trichlorophenol	SVOC	6,100,000	68,000,000	<290	
88-06-2	2,4,6-Trichlorophenol	SVOC	19,000	74,000	<290	
102-83-2	2,4-Dichlorophenol	SVOC	NA	NA	<290	
105-67-9	2,4-Dimethylphenol	SVOC	1,200,000	14,000,000	<290	
51-28-5	2,4-Dinitrophenol	SVOC	120,000	1,400,000	<290	
121-14-2	2,4-Dinitrotoluene	SVOC	700	3,000	<290	
606-20-2	2,6-Dinitrotoluene	SVOC	700	3,000	<290	
91-58-7	2-Chloronaphthalene	SVOC	NA	NA	<290	
95-57-8	2-Chlorophenol	SVOC	310,000	2,200,000	<290	
91-57-6	2-Methylnaphthalene	SVOC	230,000	2,400,000	<290	
95-48-7	2-Methylphenol	SVOC	310,000	3,400,000	<290	
88-74-4	2-Nitroaniline	SVOC	39,000	23,000,000	<290	
88-75-5	2-Nitrophenol	SVOC	NA	NA	<290	
91-94-1	3,3-Dichlorobenzidine	SVOC	1,000	4,000	<290	
108-39-4	m-Cresol(s)	SVOC	NA	NA	<290	
99-09-2	3-Nitroaniline	SVOC	NA	NA	<290	
534-52-1	4,6-Dinitro-2-methylphenol	SVOC	6,000	68,000	<290	
59-50-7	4-Chloro-3-methylphenol	SVOC	NA	NA	<290	
106-47-8	4-Chloroaniline	SVOC	NA	NA	<290	
106-44-5	4-Methylphenol	SVOC	31,000	340,000	<290	
100-01-6	4-Nitroaniline	SVOC	NA	NA	<290	
100-02-7	4-Nitrophenol	SVOC	NA	NA	<290	
83-32-9	Acenaphthene	SVOC	3,400,000	37,000,000	<290	
208-96-8	Acenaphthylene	SVOC	NA	300000000	<290	
98-86-2	Acetophenone	SVOC	2,000	5,000	<290	
62-53-3	Aniline	SVOC	NA	NA	<290	
120-12-7	Anthracene	SVOC	17,000,000	30,000,000	<290	
1912-24-9	Atrazine	SVOC	210,000	2,400,000	<290	
100-52-7	Benzaldehyde	SVOC	6,100,000	68,000,000	<290	
56-55-3	Benzo-a-Anthracene	SVOC	600	8,786	<290	
50-32-8	Benzo-a-Pyrene	SVOC	200	5,719	<140	
205-99-2	Benzo-b-Fluoranthene	SVOC	600	2,000	<290	
207-08-9	Benzo-k-Fluoranthene	SVOC	6,000	23,000	<290	
191-24-2	Benzo-g,h,i-Perylene	SVOC	380,000,000	30,000,000	<290	
65-85-0	Benzoic Acid	SVOC	NA	NA	<290	
100-51-6	Benzyl Alcohol	SVOC	NA	NA	<290	
111-44-4	Bis(2-Chloroethyl)ether	SVOC	400	2,000	<290	
108-60-1	Bis(2-Chloroisopropyl)ether	SVOC	23,000	67,000	<290	
117-81-7	Bis(2-Ethylhexyl)Phthalate	SVOC	35,000	140,000	<290	
85-68-7	Butylbenzylphthalate	SVOC	1,200,000	14,000,000	<290	
105-60-2	Caprolactam	SVOC	31,000,000	340,000,000	<290	
86-74-8	Carbazole	SVOC	24,000	96,000	<290	
218-01-9	Chrysene	SVOC	62,000	230,000	<290	
132-64-9	Dibenzofuran	SVOC	NA	NA	<290	
53-70-3	Dibenzo-a,h-Anthracene	SVOC	200	627	<140	
84-66-2	Diethyl Phthalate	SVOC	49,000,000	550000000	<290	
131-11-3	Dimethyl Phthalate	SVOC	NA	NA	<290	
84-74-2	Di-n-Butyl Phthalate	SVOC	6,100,000	68000000	<290	
25321-14-6	Dinitrotoluene(2,4-/2,6-)	SVOC	NA	NA	<290	
117-84-0	Di-n-Octyl Phthalate	SVOC	2,400,000	27000000	<290	
206-44-0	Fluoranthene	SVOC	2,300,000	24,000,000	<290	
86-73-7	Fluorene	SVOC	2,300,000	24,000,000	<290	
118-74-1	Hexachlorobenzene	SVOC	300	1,000	<290	
77-47-4	Hexachlorocyclopentadiene	SVOC	45,000	110,000	<290	
67-72-1	Hexachloroethane	SVOC	35,000	140,000	<290	
193-39-5	Indeno(1,2,3-cd)Pyrene	SVOC	600	4,048	<290	
78-59-1	Isophorone	SVOC	510,000	2,000,000	<290	
98-95-3	Nitrobenzene	SVOC	31,000	340,000	<290	
62-75-9	N-Nitrosodimethylamine	SVOC	700	700	<290	
621-64-7	N-Nitroso-di-n-Propylamine	SVOC	200	300	<140	
86-30-6	N-Nitrosodiphenylamine	SVOC	99,000	390,000	<290	
87-86-5	Pentachlorophenol	SVOC	3,000	10,000	<290	
85-01-8	Phenanthrene	SVOC	NA	300,000,000	<290	
108-95-2	Phenol	SVOC	18000000	210,000,000	<290	
129-00-0	Pyrene	SVOC	1,700,000	18,000,000	<290	

**Soil Analysis**  
Location: 29-76 Northern Blvd, Long Island City

**Impact Submittal 322a**  
**11/29/11**

CAS Number	Parameter Name	Parameter ID	NJ RDCSRS	Lincoln Park Landfill Acceptance Criteria	YL TCS 6 COMP	YL TCS 6 GRAB
93-76-5	2,4,5-T	HERBICIDE	NA	NA	<100	
93-72-1	2,4,5-TP Acid	PESTICIDE	NA	NA	<100	
94-75-7	2,4-D	HERBICIDE	NA	NA	<100	
72-54-8	4,4-DDD	PESTICIDE	3,000	13,000	<2.4	
72-55-9	4,4-DDE	PESTICIDE	2,000	9,000	<2.4	
50-29-3	4,4-DDT	PESTICIDE	2,000	8,000	<2.4	
309-00-2	Aldrin	PESTICIDE	40	200	<2.4	
319-84-6	alpha-BHC	PESTICIDE	100	500	<2.4	
5103-71-9	Alpha Chlordane	PESTICIDE	NA	NA	<2.4	
12674-11-2	Aroclor 1016	PCB	NA	NA	<57	
1104-28-2	Aroclor 1221	PCB	NA	NA	<57	
11141-16-5	Aroclor 1232	PCB	NA	NA	<57	
53469-21-9	Aroclor 1242	PCB	NA	NA	<57	
12672-29-6	Aroclor 1248	PCB	NA	NA	<57	
11097-69-1	Aroclor 1254	PCB	NA	NA	<57	
11096-82-5	Aroclor 1260	PCB	NA	NA	<57	
319-85-7	beta-BHC	PESTICIDE	400	2,000	<2.4	
57-74-9	Chlordane	PESTICIDE	200	1,000	<110	
319-86-8	delta-BHC	PESTICIDE	NA	NA	<2.4	
1918-00-9	Dicamba	HERBICIDE	NA	NA	<100	
60-57-1	Dieldrin	PESTICIDE	40	200	<2.4	
115-29-7	Endosulfan	PESTICIDE	470,000	6,800,000	<2.4	
959-98-8	Endosulfan I	PESTICIDE	NA	NA	<2.4	
33213-65-9	Endosulfan II	PESTICIDE	NA	NA	<2.4	
1031-07-8	Endosulfan Sulfate	PESTICIDE	470,000	6,800,000	<2.4	
72-20-8	Endrin	PESTICIDE	23,000	340,000	<2.4	
58-89-9	gamma-BHC	PESTICIDE	400	2,000	<2.4	
5103-74-2	Gamma Chlordane	PESTICIDE	NA	NA	<2.4	
76-44-8	Heptachlor	PESTICIDE	100	700	<2.4	
1024-57-3	Heptachlor Epoxide	PESTICIDE	70	300	<2.4	
72-43-5	Methoxychlor	PESTICIDE	390,000	5,700,000	<2.4	
56-38-2	Parathion	PESTICIDE	NA	NA	<30	
1336-36-3	Polychlorinated Biphenyls	PESTICIDE	200	1,000	<57	
8001-35-2	Toxaphene	PESTICIDE	600	3,000	<240	
	Unit		mg/kg	mg/kg		
7429-90-5	Aluminum, Al	METAL	78,000	NA	4325	
7440-36-0	Antimony, Sb	METAL	31	450	<5.8	
7440-38-2	Arsenic, As	METAL	19	19	2.12	
7440-39-3	Barium, Ba	METAL	16,000	59,000	23.3	
7440-41-7	Beryllium, Be	METAL	16	140	<0.58	
7440-43-9	Cadmium, Cd	METAL	78	78	0.797	
7440-47-3	Chromium, Cr	METAL	NA	NA	6.93	
18540-29-9	Chromium, hexavalent	METAL	NA	NA	<0.5	
16065-83-1	Chromium, trivalent	METAL	NA	NA	6.93	
7440-48-4	Cobalt, Co	METAL	NA	NA	<5.8	
7440-50-8	Copper, Cu	METAL	NA	NA	8.36	
57-12-5	Cyanide	METAL	1,600	23,000	<1.16	
7439-89-6	Iron, Fe	METAL	NA	NA	8159	
7439-92-1	Lead, Pb	METAL	400	800	<5.8	
7439-96-5	Manganese, Mn	METAL	11,000	5,900	155	
7439-97-6	Mercury, Hg	METAL	23	65	<0.095	
7440-02-0	Nickel, Ni	METAL	1,600	23,000	5.59	
7782-49-2	Selenium, Se	METAL	390	5,700	<5.8	
7440-22-4	Silver, Ag	METAL	390	5,700	<1.16	
7440-28-0	Thallium, Ti	METAL	5	79	<2.9	
7440-62-2	Vanadium, V	METAL	78	1,100	11.4	
7440-66-6	Zinc, Zn	METAL	23,000	110,000	22.2	
pH	pH	NA	NA	NA	10.58	
TPH	TPH	NA	NA	NA	44	

Notes: Shaded values indicate an exceedance of NJ RDCSCC

**TCLP Analysis**  
Location: 29-76 Northern Blvd, Long Island City

Impact Submittal 332a  
11/29/11

CAS Number	Parameter Name	Parameter ID	TCLP Hazardous Waste Regulatory Levels	YL TGS 6
	Sample ID	Depth		
	Unit		mg/L	mg/L
7440-38-2	Arsenic, As	METAL	5	<0.01
7440-39-3	Barium, Ba	METAL	100	<0.05
7440-43-9	Cadmium, Cd	METAL	1	<0.005
7440-47-3	Chromium, Cr	METAL	5	<0.01
7439-92-1	Lead, Pb	METAL	5	<0.05
7439-97-6	Mercury, Hg	METAL	0.2	<0.005
7782-49-2	Selenium, Se	METAL	1	<0.05
7440-22-4	Silver, Ag	METAL	5	<0.01





Impact Submittal 336a  
12/19/11

Soil Analysis  
Location: 29-76 Northern Blvd, Long Island City

CAS Number	Parameter Name	Parameter ID	NYCRR 375 Residential	NYCRR 375 Protection of Groundwater	NJ RDCSRS	Lincoln Park Landfill Acceptance Criteria	GM Linden Acceptance Criteria	YL TCS7 Comp	YL TCS7 Comp
93-76-5	2,4,5-T	HERBICIDE	100000	1900	NA	NA	NA	<100	
93-72-1	2,4,5-TP Acid	PESTICIDE	58,000	3,800	NA	NA	NA	<100	
94-75-7	2,4-D	HERBICIDE	100000	500	NA	NA	NA	<100	
72-54-8	4,4-DDD	PESTICIDE	2,600	14,000	3,000	13,000	50	<2.4	
72-55-9	4,4-DDE	PESTICIDE	1,800	17,000	2,000	9,000	50	<2.4	
50-29-3	4,4-DDT	PESTICIDE	1,700	136,000	2,000	8,000	500	<2.4	
309-00-2	Aldrin	PESTICIDE	19	190	40	200	50	<2.4	
319-84-6	alpha-BHC	PESTICIDE	97	20	100	500	NA	<2.4	
5103-71-9	Alpha Chlordane	PESTICIDE	910	2,900	NA	NA	NA	<2.4	
12674-11-2	Aroclor 1016	PCB	NA	NA	NA	NA	NA	<54	
1104-28-2	Aroclor 1221	PCB	NA	NA	NA	NA	NA	<54	
11141-16-5	Aroclor 1232	PCB	NA	NA	NA	NA	NA	<54	
53469-21-9	Aroclor 1242	PCB	NA	NA	NA	NA	NA	<54	
12672-29-6	Aroclor 1248	PCB	NA	NA	NA	NA	NA	<54	
11097-69-1	Aroclor 1254	PCB	NA	NA	NA	NA	NA	<54	
11096-82-5	Aroclor 1260	PCB	NA	NA	NA	NA	NA	<54	
319-85-7	beta-BHC	PESTICIDE	72	90	400	2000	NA	<2.4	
57-74-9	Chlordane	PESTICIDE	NA	NA	200	1000	NA	<120	
319-86-8	delta-BHC	PESTICIDE	100,000a	250	NA	NA	NA	<2.4	
1918-00-9	Dicamba	HERBICIDE	NA	NA	NA	NA	NA	<2.4	
60-57-1	Dieldrin	PESTICIDE	39	100	40	200	50	<2.4	
115-29-7	Endosulfan	PESTICIDE	NA	NA	470,000	6,800,000	50	<2.4	
959-98-8	Endosulfan I	PESTICIDE	4,800i	102,000	NA	NA	NA	<2.4	
33213-65-9	Endosulfan II	PESTICIDE	4,800i	102,000	NA	NA	NA	<2.4	
1031-07-8	Endosulfan Sulfate	PESTICIDE	4,800i	1,000,000c	470,000	6,800,000	NA	<2.4	
72-20-8	Endrin	PESTICIDE	2,200	60	23,000	340,000	50	<2.4	
58-89-9	gamma-BHC	PESTICIDE	280	100	400	2000	50	<2.4	
5103-74-2	Gamma Chlordane	PESTICIDE	540	14000	NA	NA	NA	<2.4	
76-44-8	Heptachlor	PESTICIDE	420	380	100	700	50	<2.4	
1024-57-3	Heptachlor Epoxide	PESTICIDE	77	20	70	300	NA	<2.4	
72-43-5	Methoxychlor	PESTICIDE	100000	900000	390,000	5,700,000	50	<2.4	
56-38-2	Parathion	PESTICIDE	100000	1200	NA	NA	NA	<30	
1336-36-3	Polychlorinated Biphenyls	PESTICIDE	1,000	3,200	200	1000	50	<54	
8001-35-2	Toxaphene	PESTICIDE	NA	NA	600	3000	50	<240	
	Unit		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
7429-90-5	Aluminum, Al	METAL	NA	NA	78,000	NA	NA	7,639	
7440-36-0	Antimony, Sb	METAL	NA	NA	31	450	353	<5.17	
7440-38-2	Arsenic, As	METAL	16f	16f	19	19	178	3	
7440-39-3	Barium, Ba	METAL	350f	820	16,000	59,000	17400	81	
7440-41-7	Beryllium, Be	METAL	14	47	16	140	16.2	<0.517	
7440-43-9	Cadmium, Cd	METAL	2.5f	7.5	78	78	51.4	2	
7440-47-3	Chromium, Cr	METAL	NA	NA	NA	NA	247	18	
18540-29-9	Chromium, hexavalent	METAL	22	19	NA	NA	6100; 20 g; i	<0.5	
16065-83-1	Chromium, trivalent	METAL	36	NA	NA	NA	j	18.1	
7440-48-4	Cobalt, Co	METAL	30000	NA	NA	NA	124	9.05	
7440-50-8	Copper, Cu	METAL	270	1,720	NA	NA	1500	34.7	
57-12-5	Cyanide	METAL	27	40	1,600	23,000	21,000 o	<1.19	
7439-89-6	Iron, Fe	METAL	2000000	NA	NA	NA	NA	19,154	
7439-92-1	Lead, Pb	METAL	400	450	400	800	1000	13	
7439-96-5	Manganese, Mn	METAL	2,000f	2,000f	11,000	5,900	2200	229	
7439-97-6	Mercury, Hg	METAL	0.81j	0.73	23	65	0.85	<0.095	
7440-02-0	Nickel, Ni	METAL	140	130	1,600	23,000	1170	12	
7782-49-2	Selenium, Se	METAL	36	4f	390	5,700	11.7	<5.17	
7440-22-4	Silver, Ag	METAL	36	8.3	390	5,700	95	<1.18	
7440-28-0	Thallium, Tl	METAL	NA	NA	5	79	1.8	<2.63	
7440-52-2	Vanadium, V	METAL	100000	NA	78	1,100	155	18	
7440-66-6	Zinc, Zn	METAL	2,200	2,480	23,000	110,000	1500	62	
pH	pH	pH	NA	NA	NA	NA	NA	8.13	
TPH	TPH	TPH	NA	NA	NA	NA	NA	<44	



## TCLP Analysis

Impact Submittal 336a  
12/19/11

Location: 29-76 Northern Blvd, Long Island City

CAS Number	Parameter Name	Parameter ID	YL TCS 7 Comp
	Sample ID	Depth	
	Unit		mg/L
7440-38-2	Arsenic, As	METAL	<0.01
7440-39-3	Barium, Ba	METAL	0.088
7440-43-9	Cadmium, Cd	METAL	<0.005
7440-47-3	Chromium, Cr	METAL	<0.01
7439-92-1	Lead, Pb	METAL	<0.05
7439-97-6	Mercury, Hg	METAL	<0.005
7782-49-2	Selenium, Se	METAL	<0.05
7440-22-4	Silver, Ag	METAL	<0.01





## **Soil Analysis**

Impact Submittal 339a  
12/27/11

**TCLP Analysis**  
Location: 29-76 Northern Blvd, Long Island City

Impact Submittal 339a  
12/27/11

CAS Number	Parameter Name	Parameter ID	TCLP Hazardous Waste Regulatory Levels	YL TCS 8 Comp
	Sample ID	Depth		
	Unit		mg/L	mg/L
7440-38-2	Arsenic, As	METAL	5	<0.01
7440-39-3	Barium, Ba	METAL	100	0.075
7440-43-9	Cadmium, Cd	METAL	1	<0.005
7440-47-3	Chromium, Cr	METAL	5	<0.01
7439-92-1	Lead, Pb	METAL	5	<0.05
7439-97-6	Mercury, Hg	METAL	0.2	<0.005
7782-49-2	Selenium, Se	METAL	1	<0.05
7440-22-4	Silver, Ag	METAL	5	<0.01

**Soil Analysis**  
Location: 29-76 Northern Blvd, Long Island City

Impact Submittal 349a
2/1/12

CAS Number	Parameter Name	Parameter ID	NJ RDCSRS	Lincoln Park Landfill Acceptance Criteria		GM Linden Acceptance Criteria	TCS 10
				Depth	ug/kg		
				Unit	ug/kg		
630-20-6	1,1,1,2-Tetrachloroethane	VOC	NA	NA	0	<5.7	
71-55-6	1,1,1-Trichloroethane	VOC	290,000	4,200,000	0	<5.7	
79-34-5	1,1,2,2-Tetrachloroethane	VOC	1,000	3,000	0	<5.7	
79-00-5	1,1,2-Trichloroethane	VOC	2,000	6,000	0	<5.7	
76-13-1	1,1,2 Trichloro-1,2,2 Trifluoroethane	VOC	NA	NA	0	<5.7	
92-52-4	1-1- Biphenyl	VOC	3,100,000	34,000,000	0	<5.7	
75-34-3	1,1-Dichloroethane	VOC	8,000	24,000	0	<5.7	
75-35-4	1,1-Dichloroethene	VOC	11,000	150,000	0	<5.7	
96-18-4	1,2,3-Trichloropropane	VOC	NA	NA	0	<5.7	
95-63-6	1,2,4-Trimethylbenzene	VOC	NA	NA	0	<5.7	
96-12-8	1,2-Dibromo-3-Chloropropane	VOC	80	200	0	<5.7	
106-93-4	1,2-Dibromoethane	VOC	8	40	0	<5.7	
95-50-1	1,2-Dichlorobenzene	VOC	5,300,000	59,000,000	0	<5.7	
107-06-2	1,2-Dichloroethane	VOC	900	3,000	0	<5.7	
78-87-5	1,2-Dichloropropane	VOC	2,000	5,000	0	<5.7	
108-67-8	1,3,5-Trimethylbenzene	VOC	NA	NA	0	<5.7	
541-73-1	1,3-Dichlorobenzene	VOC	5,300,000	59,000,000	0	<5.7	
142-28-9	1,3-Dichloropropane	VOC	NA	NA	0	<5.7	
542-75-6	1,3-Dichloropropene(cis and trans)	VOC	2,000	7,000	0	<5.7	
106-46-7	1,4-Dichlorobenzene	VOC	5,000	13,000	0	<5.7	

**Soil Analysis**  
Location: 29-76 Northern Blvd, Long Island City

Impact Submittal 349a
2/1/12

CAS Number	Parameter Name	Parameter ID	NJ RDCSRS	Lincoln Park Landfill Acceptance Criteria	GM Linden Acceptance Criteria	TCS 10
	Sample ID	Depth				
87-68-3	Hexachlorobutadiene	SVOC	6,000	25,000	0	<5.7
122-66-7	1,2-Diphenylhydrazine	SVOC	700	2,000	NA	<270
120-82-1	1,2,4-Trichlorobenzene	SVOC	73,000	820,000	1200000	<270
95-95-4	2,4,5-Trichlorophenol	SVOC	6,100,000	68,000,000	10,000,000 c	<270
88-06-2	2,4,6-Trichlorophenol	SVOC	19,000	74,000	270000	<270
102-83-2	2,4-Dichlorophenol	SVOC	NA	NA	3100000	<270
105-67-9	2,4-Dimethylphenol	SVOC	1,200,000	14,000,000	10,000,000 c	<270
51-28-5	2,4-Dinitrophenol	SVOC	120,000	1,400,000	2100000	<610
121-14-2	2,4-Dinitrotoluene	SVOC	700	3,000	NA	<270
606-20-2	2,6-Dinitrotoluene	SVOC	700	3,000	NA	<270
91-58-7	2-Chloronaphthalene	SVOC	NA	NA	NA	<270
95-57-8	2-Chlorophenol	SVOC	310,000	2,200,000	5200000	<270
91-57-6	2-Methylnaphthalene	SVOC	230,000	2,400,000	NA	<270
95-48-7	2-Methylphenol	SVOC	310,000	3,400,000	10,000,000 c	<270
88-74-4	2-Nitroaniline	SVOC	39,000	23,000,000	NA	<610
88-75-5	2-Nitrophenol	SVOC	NA	NA	NA	<270
191-94-1	3,3-Dichlorbenzidine	SVOC	1.000	4.000	6000	<270

## **Soil Analysis**

Impact Submittal 349a  
2/1/12

Impact Submittal 349a  
2/1/12

**TCLP Analysis**  
Location: 29-76 Northern Blvd, Long Island City

CAS Number	Parameter Name	Parameter ID	TCLP Hazardous Waste Regulatory Levels	TCS 10
	Sample ID	Depth		
	Unit		mg/L	
7440-38-2	Arsenic, As	METAL	5	<0.1
7440-39-3	Barium, Ba	METAL	100	0.23
7440-43-9	Cadmium, Cd	METAL	1	<0.05
7440-47-3	Chromium, Cr	METAL	5	<0.1
7439-92-1	Lead, Pb	METAL	5	<0.1
7439-97-6	Mercury, Hg	METAL	0.2	<0.0002
7782-49-2	Selenium, Se	METAL	1	<0.1
7440-22-4	Silver, Ag	METAL	5	<0.1

**Soil Analysis**  
 Location: 29-76 Northern Blvd, Long Island City

Impact Submittal 350a 2/9/12
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CAS Number	Parameter Name	Parameter ID	NJ RDCSRS	Lincoln Park Landfill Acceptance Criteria	GM Linden Acceptance Criteria"	TCS 11
	Sample ID	Depth				
	Unit		ug/kg	ug/kg	ug/kg	ug/kg
630-20-6	1,1,1,2-Tetrachloroethane	VOC	NA	NA	0	<5.8
71-55-6	1,1,1-Trichloroethane	VOC	290,000	4,200,000	0	<5.8
79-34-5	1,1,2,2-Tetrachloroethane	VOC	1,000	3,000	0	<5.8
79-00-5	1,1,2-Trichloroethane	VOC	2,000	6,000	0	<5.8
76-13-1	1,1,2 Trichloro-1,2,2 Trifluoroethane	VOC	NA	NA	0	<5.8
92-52-4	1-1- Biphenyl	VOC	3,100,000	34,000,000	0	<5.8
75-34-3	1,1-Dichloroethane	VOC	8,000	24,000	0	<5.8
75-35-4	1,1-Dichloroethene	VOC	11,000	150,000	0	<5.8
96-18-4	1,2,3-Trichloropropane	VOC	NA	NA	0	<5.8
95-63-6	1,2,4-Trimethylbenzene	VOC	NA	NA	0	<5.8
96-12-8	1,2-Dibromo-3-Chloropropane	VOC	80	200	0	<5.8
106-93-4	1,2-Dibromoethane	VOC	8	40	0	<5.8
95-50-1	1,2-Dichlorobenzene	VOC	5,300,000	59,000,000	0	<5.8
107-06-2	1,2-Dichloroethane	VOC	900	3,000	0	<5.8
78-87-5	1,2-Dichloropropane	VOC	2,000	5,000	0	<5.8
108-67-8	1,3,5-Trimethylbenzene	VOC	NA	NA	0	<5.8
541-73-1	1,3-Dichlorobenzene	VOC	5,300,000	59,000,000	0	<5.8
142-28-9	1,3-Dichloropropane	VOC	NA	NA	0	<5.8
542-75-6	1,3-Dichloropropene(cis and trans)	VOC	2,000	7,000	0	<5.8
106-46-7	1,4-Dichlorobenzene	VOC	5,000	13,000	0	<5.8
123-91-1	1,4-Dioxane	VOC	NA	NA	0	<5.8
78-93-3	2-Butanone	VOC	3,100,000	44,000,000	0	<5.8
95-49-8	2-Chlorotoluene	VOC	NA	NA	0	<5.8
108-10-1	4-Methyl-2-Pentanone	VOC	NA	NA	0	<5.8
67-64-1	Acetone	VOC	70,000,000	NA	0	<29
107-02-8	Acrolein	VOC	500	1000	0	<5.8
107-13-1	Acrylonitrile	VOC	900	3,000	0	<12
71-43-2	Benzene	VOC	2,000	5,000	0	<5.8
92-87-5	Benzidine	VOC	700	700	0	<5.8
74-97-5	Bromochloromethane	VOC	NA	NA	0	<5.8
75-27-4	Bromodichloromethane	VOC	1,000	3,000	0	<5.8
75-25-2	Bromoform	VOC	81,000	280,000	0	<5.8
74-83-9	Bromomethane	VOC	25,000	59,000	0	<5.8
75-15-0	Carbon Disulfide	VOC	7,800,000	110,000,000	0	<5.8
56-23-5	Carbon Tetrachloride	VOC	600	2000	0	<5.8
108-90-7	Chlorobenzene	VOC	510,000	7,400,000	0	<5.8
124-48-1	Chlorodibromomethane	VOC	3,000	8,000	0	<5.8
75-00-3	Chloroethane	VOC	220,000	1,100,000	0	<5.8
67-66-3	Chloroform	VOC	600	2000	0	<5.8
74-87-3	Chloromethane	VOC	4,000	12,000	0	<5.8
156-59-2	cis-1,2-Dichloroethene	VOC	230,000	560,000	0	<5.8
74-95-3	Dibromomethane	VOC	NA	NA	0	<5.8
75-71-8	Dichlorodifluoromethane	VOC	490,000	230,000,000	0	<5.8
100-41-4	Ethylbenzene	VOC	7,800,000	110,000,000	0	<5.8
98-82-8	Isopropylbenzene	VOC	NA	NA	0	<5.8
79-20-9	Methyl Acetate	VOC	78,000,000	NA	0	<5.8
75-09-2	Methylene Chloride	VOC	34,000	97,000	0	<5.8
1634-04-4	Methyl Tert-Butyl Ether	VOC	110,000	320,000	0	<12
91-20-3	Naphthalene	VOC	6,000	17,000	0	<5.8
104-51-8	n-Butylbenzene	VOC	NA	NA	0	<5.8
103-65-1	n-Propylbenzene	VOC	NA	NA	0	<5.8
99-87-6	p-Isopropyltoluene	VOC	NA	NA	0	<5.8
135-98-8	sec-Butylbenzene	VOC	NA	NA	0	<5.8
100-42-5	Styrene	VOC	90,000	260,000	0	<5.8
98-06-6	tert-Butylbenzene	VOC	NA	NA	0	<5.8
75-65-0	Tertiary Butyl Alcohol	VOC	1,400,000	11,000,000	0	<5.8
127-18-4	Tetrachloroethene	VOC	2,000	5,000	0	<5.8
108-88-3	Toluene	VOC	6,300,000	91,000,000	0	<5.8
1330-20-7	Total Xylenes	VOC	12,000,000	170,000,000	0	<5.8
156-60-5	trans-1,2-Dichloroethene	VOC	300,000	1,000,000	0	<5.8
79-01-6	Trichloroethene	VOC	7,000	20,000	0	<5.8
75-69-4	Trichlorofluoromethane	VOC	23,000,000	340,000,000	0	<5.8
108-05-4	Vinyl Acetate	VOC	NA	NA	0	<5.8
75-01-4	Vinyl Chloride	VOC	700	2,000	0	<5.8

**Soil Analysis**  
Location: 29-76 Northern Blvd, Long Island City

Impact Submittal 350a
2/9/12

CAS Number	Parameter Name	Parameter ID	NJ RDCSRS	Lincoln Park Landfill Acceptance Criteria	GM Linden Acceptance Criteria"	TCS 11
87-68-3	Sample ID	Depth				
87-68-3	Hexachlorobutadiene	SVOC	6,000	25,000	0	<5.8
122-66-7	1,2- Diphenylhydrazine	SVOC	700	2,000	NA	<270
120-82-1	1,2,4-Trichlorobenzene	SVOC	73,000	820,000	1200000	<270
95-95-4	2,4,5-Trichlorophenol	SVOC	6,100,000	68,000,000	10,000,000 c	<270
88-06-2	2,4,6-Trichlorophenol	SVOC	19,000	74,000	270000	<270
102-83-2	2,4-Dichlorophenol	SVOC	NA	NA	3100000	<270
105-67-9	2,4-Dimethylphenol	SVOC	1,200,000	14,000,000	10,000,000 c	<270
51-28-5	2,4-Dinitrophenol	SVOC	120,000	1,400,000	2100000	<610
121-14-2	2,4-Dinitrotoluene	SVOC	700	3,000	NA	<270
606-20-2	2,6-Dinitrotoluene	SVOC	700	3,000	NA	<270
91-58-7	2-Chloronaphthalene	SVOC	NA	NA	NA	<270
95-57-8	2-Chlorophenol	SVOC	310,000	2,200,000	5200000	<270
91-57-6	2-Methylnaphthalene	SVOC	230,000	2,400,000	NA	<270
95-48-7	2-Methylphenol	SVOC	310,000	3,400,000	10,000,000 c	<270
88-74-4	2-Nitroaniline	SVOC	39,000	23,000,000	NA	<610
88-75-5	2-Nitrophenol	SVOC	NA	NA	NA	<270
91-94-1	3,3-Dichlorobenzidine	SVOC	1,000	4,000	6000	<270
108-39-4	m-Cresol(s)	SVOC	NA	NA	NA	<270
99-09-2	3-Nitroaniline	SVOC	NA	NA	NA	610
534-52-1	4,6-Dinitro-2-methylphenol	SVOC	6,000	68,000	NA	<270
59-50-7	4-Chloro-3-methylphenol	SVOC	NA	NA	10,000,000 c	<270
106-47-8	4-Chloroaniline	SVOC	NA	NA	4200000	<270
106-44-5	4-Methylphenol	SVOC	31,000	340,000	10,000,000 c	<270
100-01-6	4-Nitroaniline	SVOC	NA	NA	NA	610
100-02-7	4-Nitrophenol	SVOC	NA	NA	NA	1,100
83-32-9	Acenaphthene	SVOC	3,400,000	37,000,000	100000	<270
208-96-8	Acenaphthylene	SVOC	NA	300,000,000	8600	<270
98-86-2	Acetophenone	SVOC	2,000	5,000	NA	<270
62-53-3	Aniline	SVOC	NA	NA	NA	<270
120-12-7	Anthracene	SVOC	17,000,000	30,000,000	100000	<270
1912-24-9	Atrazine	SVOC	210,000	2,400,000	NA	<270
100-52-7	Benzaldehyde	SVOC	6,100,000	68,000,000	NA	<270
56-55-3	Benzo-a-Anthracene	SVOC	600	8,786	120000	<270
50-32-8	Benzo-a-Pyrene	SVOC	200	5,719	71000	<270
205-99-2	Benzo-b-Fluoranthene	SVOC	600	2,000	50000	<270
207-08-9	Benzo-k-Fluoranthene	SVOC	6,000	23,000	86000	<270
191-24-2	Benzo-g,h,i-Perylene	SVOC	380,000,000	30,000,000	40000	<270
65-85-0	Benzoic Acid	SVOC	NA	NA	NA	<1100
100-51-6	Benzyl Alcohol	SVOC	NA	NA	10,000,000 c	<270
111-44-4	Bis(2-Chloroethyl)ether	SVOC	400	2,000	3000	<380
108-60-1	Bis(2-Chloroisopropyl)ether	SVOC	23,000	67,000	10,000,000 c	<270
117-81-7	Bis(2-Ethylhexyl)Phthalate	SVOC	35,000	140,000	210000	<270
85-68-7	Butylbenzylphthalate	SVOC	1,200,000	14,000,000	10,000,000 c	<270
105-60-2	Caprolactam	SVOC	31,000,000	340,000,000	NA	<270
86-74-8	Carbazole	SVOC	24,000	96,000	NA	<570
218-01-9	Chrysene	SVOC	62,000	230,000	120000	<270
132-64-9	Dibenzofuran	SVOC	NA	NA	NA	<270
53-70-3	Dibenzo-a,h-Anthracene	SVOC	200	627	13000	<270
84-66-2	Diethyl Phthalate	SVOC	49,000,000	550,000,000	10,000,000 c	<270
131-11-3	Dimethyl Phthalate	SVOC	NA	NA	10,000,000 c	<270
84-74-2	Di-n-Butyl Phthalate	SVOC	6,100,000	68,000,000	10,000,000 c	<270
25321-14-6	Dinitrotoluene(2,4-/2,6-)	SVOC	NA	NA	4,000 l	<270
117-84-0	Di-n-Octyl Phthalate	SVOC	2,400,000	27,000,000	10,000,000 c	<270
206-44-0	Fluoranthene	SVOC	2,300,000	24,000,000	100000	<270
86-73-7	Fluorene	SVOC	2,300,000	24,000,000	100000	<270
118-74-1	Hexachlorobenzene	SVOC	300	1,000	2000	<270
77-47-4	Hexachlorocyclopentadiene	SVOC	45,000	110,000	7300000	<270
67-72-1	Hexachloroethane	SVOC	35,000	140,000	100000	<270
193-39-5	Indeno(1,2,3-cd)Pyrene	SVOC	600	4,048	39000	<270
78-59-1	Isophorone	SVOC	510,000	2,000,000	10,000,000 c	<270
98-95-3	Nitrobenzene	SVOC	31,000	340,000	520000	<270
62-75-9	N-Nitrosodimethylamine	SVOC	700	700	NA	<380
621-64-7	N-Nitroso-di-n-Propylamine	SVOC	200	300	660 f	<270
86-30-6	N-Nitrosodiphenylamine	SVOC	99,000	390,000	600000	<380
87-86-5	Pentachlorophenol	SVOC	3,000	10,000	24000	<380
85-01-8	Phenanthrene	SVOC	NA	300,000,000	480000	<270
108-95-2	Phenol	SVOC	18000000	210000000	10,000,000 c	<270
129-00-0	Pyrene	SVOC	1,700,000	18,000,000	100,000	<270

## **Soil Analysis**

Location: 29-76 Northern Blvd, Long Island City

Impact Submittal 350a  
2/9/12

CAS Number	Parameter Name	Parameter ID	NJ RDCSRS	Lincoln Park Landfill Acceptance Criteria	GM Linden Acceptance Criteria"	TCS: 1:1
	Sample ID	Depth				
93-76-5	2,4,5-T	HERBICIDE	NA	NA	NA	<48
93-72-1	2,4,5-TP Acid	PESTICIDE	NA	NA	NA	<48
94-75-7	2,4-D	HERBICIDE	NA	NA	NA	<48
72-54-8	4,4-DDD	PESTICIDE	3,000	13,000	50	<36
72-55-9	4,4-DDE	PESTICIDE	2,000	9,000	50	<36
50-29-3	4,4-DDT	PESTICIDE	2,000	8,000	500	<36
309-00-2	Aldrin	PESTICIDE	40	200	50	<5.7
319-84-6	alpha-BHC	PESTICIDE	100	500	NA	<18
5103-71-9	Alpha Chlordane	PESTICIDE	NA	NA	NA	<18
12674-11-2	Aroclor 1016	PCB	NA	NA	NA	<380
1104-28-2	Aroclor 1221	PCB	NA	NA	NA	<380
11141-16-5	Aroclor 1232	PCB	NA	NA	NA	<380
53469-21-9	Aroclor 1242	PCB	NA	NA	NA	<380
12672-29-6	Aroclor 1248	PCB	NA	NA	NA	<380
11097-69-1	Aroclor 1254	PCB	NA	NA	NA	<380
11096-82-5	Aroclor 1260	PCB	NA	NA	NA	<380
319-85-7	beta-BHC	PESTICIDE	400	2000	NA	<18
57-74-9	Chlordane	PESTICIDE	200	1000	NA	<57
319-86-8	delta-BHC	PESTICIDE	NA	NA	NA	<18
1918-00-9	Dicamba	HERBICIDE	NA	NA	NA	<48
60-57-1	Dieldrin	PESTICIDE	40	200	50	<5.7
115-29-7	Endosulfan	PESTICIDE	470,000	6,800,000	50	<18
959-98-8	Endosulfan I	PESTICIDE	NA	NA	NA	<18
33213-65-9	Endosulfan II	PESTICIDE	NA	NA	NA	<36
1031-07-8	Endosulfan Sulfate	PESTICIDE	470,000	6,800,000	NA	<36
72-20-8	Endrin	PESTICIDE	23,000	340,000	50	<36
58-89-9	gamma-BHC	PESTICIDE	400	2000	50	<18
5103-74-2	Gamma Chlordane	PESTICIDE	NA	NA	NA	<18
76-44-8	Heptachlor	PESTICIDE	100	700	50	<11
1024-57-3	Heptachlor Epoxide	PESTICIDE	70	300	NA	<18
72-43-5	Methoxychlor	PESTICIDE	390,000	5,700,000	50	<180
56-38-2	Parathion	PESTICIDE	NA	NA	NA	<30
1336-36-3	Polychlorinated Biphenyls	PESTICIDE	200	1000	50	<380
8001-35-2	Toxaphene	PESTICIDE	600	3000	50	<180
	Unit		mg/kg	mg/kg	mg/kg	mg/kg
7429-90-5	Aluminum, Al	METAL	78,000	NA	NA	6,741
7440-36-0	Antimony, Sb	METAL	31	450	353	<3.7
7440-38-2	Arsenic, As	METAL	19	19	178	<0.74
7440-39-3	Barium, Ba	METAL	16,000	59,000	17400	27
7440-41-7	Beryllium, Be	METAL	16	140	16.2	<0.74
7440-43-9	Cadmium, Cd	METAL	78	78	51.4	1
7440-47-3	Chromium, Cr	METAL	NA	NA	247	16
18540-29-9	Chromium, hexavalent	METAL	NA	NA	6100; 20 g; i	<0.5
16065-83-1	Chromium, trivalent	METAL	NA	NA	j	15.5
7440-48-4	Cobalt, Co	METAL	NA	NA	124	7.21
7440-50-8	Copper, Cu	METAL	NA	NA	1500	9.12
57-12-5	Cyanide	METAL	1,600	23,000	21,000 o	<1.18
7439-89-6	Iron, Fe	METAL	NA	NA	NA	17,484
7439-92-1	Lead, Pb	METAL	400	800	1000	5
7439-96-5	Manganese, Mn	METAL	11,000	5,900	2200	247
7439-97-6	Mercury, Hg	METAL	23	65	0.85	<0.09
7440-02-0	Nickel, Ni	METAL	1,600	23,000	1170	8
7782-49-2	Selenium, Se	METAL	390	5,700	11.7	<1.5
7440-22-4	Silver, Ag	METAL	390	5,700	95	<0.37
7440-28-0	Thallium, Ti	METAL	5	79	1.8	<3.3
7440-62-2	Vanadium, V	METAL	78	1,100	155	26
7440-66-6	Zinc, Zn	METAL	23,000	110,000	1500	23
	TPH	TPH	NA	NA	NA	<77

**TCLP Analysis**  
Location: 29-76 Northern Blvd, Long Island City

CAS Number	Parameter Name	Parameter ID	TCLP Hazardous Waste Regulatory Levels	TCS 11
	Sample ID	Depth		
	Unit		mg/L	mg/L
7440-38-2	Arsenic, As	METAL	5	<0.1
7440-39-3	Barium, Ba	METAL	100	0.28
7440-43-9	Cadmium, Cd	METAL	1	<0.05
7440-47-3	Chromium, Cr	METAL	5	<0.1
7439-92-1	Lead, Pb	METAL	5	<0.2
7439-97-6	Mercury, Hg	METAL	0.2	<0.0002
7782-49-2	Selenium, Se	METAL	1	<0.3
7440-22-4	Silver, Ag	METAL	5	<0.4